

# NATURAL HISTORY MISCELLANEA

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## Remarks on Certain European Genera of Argiopid Spiders

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Since the publication of two recent papers on the orbweaving spiders (1951, Amer. Mus. Novitates, no. 1487 and 1502) by the author, it has been possible to study at first hand a good series of European members of this family. The series was contributed by Dr. H. Homann, Gottingen, Germany, and by Dr. H. Wiehle, Dessau, Germany, himself a recognized authority on German spiders. One new genus is herein described, two new subgenera are defined, and other matters of importance are presented.

### Genus *Agalenatea*, new

Median apophysis of male palpus higher than wide; base rather broad, apical portion widely columnar, surmounted by a strong endally slanting apical spur. Tapering, finger-like embolus and closely approximated conductor subequal. Other apophyses largely lacking. Cymbium not spinose.

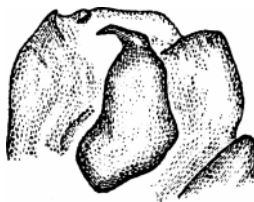


Figure 1. *Agalenatea redii* (Scopoli). Median apophysis of palpus in position.

Paracymbium slender, spur-like, subacute. Epigynum having a chitinized, short, wide scape, almost obscuring the atrial structures and vulvar openings. Carapace and widely subtriangular abdomen pilose and setose. A small spur at the base of the femur of the male palpus. A pair of distal patellar spines present. Tibia II somewhat incrassate. Coxa I with a retrolateral,

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apical spur. No rows of ventral femoral spines. Tibiae of female slightly enlarged distally as in *Epeira*. Cervical grooves of female carapace impressed. Legs dissimilar.

GENOTYPE: *Agalenatea redii* (Scopoli), Figure 1.

This genus appears to be monotypic and in spite of its old generic placement (sub *Aranea*) is closest to *Chinestela* and *Atea* (*q. v.*). The median apophysis is quite similar to that of the American genus *Conepeira* Archer.

### Genus *Chinestela* Chamberlin

The median apophysis of the male palpus of *Chinestela umbratica* (Clerck) (formerly sub *Aranea*) is shown in Figure 2. Other structures are adequately illustrated by Wiehle (1931, in Dahl, F., *Die Tierwelt Deutschlands*, fig. 138-141). If, as is claimed, several other European species are related to this



Figure 2. *Chinestela umbratica* (Clerck). Median apophysis of palpus.

species, then the list of species belonging to this genus, known previously only from the Oriental Region, can be extended. It should be noted among other features that in the male the first two pairs of legs are so much longer than the last two pairs as to give the spider a laterigrade appearance. In the female five pairs of muscle scars are subequal and conspicuous.

### Genus *Gibbaranea* Archer

In Figure 3 the median apophysis of the genotype, *G. dromedaria* (Walckenaer) (*bituberculata* Walckenaer) is shown. In this genus not only



Figure 3. *Gibbaranea dromedaria* (Walckenaer). Median apophysis of palpus.

are the characters as given in the original description, but tibia II of the male is apically incrassate and there are rows of ventral femoral spines.

**Genus *Atea* C. Koch, 1837**

Uebers. Arachniden Syst., vol. 1, p. 3. Type: *Atea hyalina* C. Koch.  
*Conaranaea* Archer, 1951, Amer. Mus. Novitates, no. 1502, p. 5. *Mimaranea*,  
*id ibid.*, p. 7.

An examination of the obscure reference shows that *Atea*, long ago synonymized variously under *Epeira*, *Aranea*, and *Araneus*, and since forgotten, was overlooked at the time when this genus was under consideration. Koch's species which must be regarded as the type of *Atea* is preoccupied by *sturmi*. In view of this fact the subgenus *Mimaranea* described recently by the author is an absolute synonym of *Atea*, and *Conaranaea* also falls to the latter, remaining only as an American subgenus.

GENOTYPE: *Atea sturmi* (Hahn).

**Genus *Araniella* Chamberlin and Ivie**

In my second paper on the orbweavers (Amer. Mus. Novitates, no. 1502, p. 3, fig. 5) an unfortunate error was introduced in that the terminal apophysis was designated as the median apophysis. In this genus the former structure lies in the usual location of the latter, but if traced to its source,

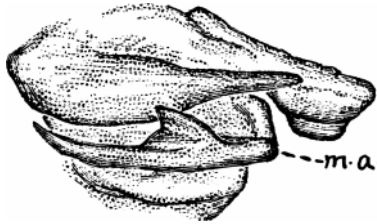


Figure 4. *Araniella alpica* (L. Koch). Median apophysis of palpus in position.

will reveal its true character. Moreover, it covers and partly obscures the ectal portion of the median apophysis. In Figure 4 these structures are shown in their proper relation in the case of *A. alpica* (**L. Koch**). Thus it is possible to demonstrate the true generic features of *Araniella*.

**Subgenus *Neosconopsis*, new**

Differing chiefly from typical *Neoscona* in that the stalk on which the main piece of the median apophysis of the male palpus is situated is wide instead of pedunculate.

TYPICAL SPECIES: *Neoscona (Neosconopsis) adianta* (Walckenaer), Figure 5.



Figure 5. *Neoscona adianta* (Walckenaer). Median apophysis of palpus.

It is rather surprising to discover that this species, long parading under *Aranea*, has nothing to do with the latter, but instead belongs to a genus otherwise very poorly represented in Eurasia.

#### **Subgenus *Cyphepeira*, new**

Differing chiefly from typical *Epeira* in that the single or paired ectal tibial spines of the male palpus are here replaced by a pair of flat, blade-like spurs. Epigynum having a chitinized apex pointing cephalad.

TYPICAL SPECIES: *Epeira (Cyphepeira) silvicultrix* C. Koch.

In the first part on orbweaving spiders (Amer. Mus. Novitates, no. 1487, p. 40) the author stated that there are no spurs on the coxae of the male. This is erroneous, for spurs are both present and well developed. In addition it should be pointed out that, although the males of some species are without the incrassate tibia, there are species in which tibia **II** is incrassate.

#### **Genus *Singa* C. Kock**

Except for the palpal characteristics, practically every blanket characterization of this extraordinary and widespread genus must admit exceptions. For example, not only are there 1 1/2 or 2 patellar spines on the male palpus, but the palpal femur is both with and without a basal cone, tibia **II** is incrassate as well as unmodified, and coxa **I** may have or lack the retrolateral spur. *Hyposinga* Ausserer is recognized by many who have until recently refused to see the complex of different and diverse genera included under the name *Aranea*. Actually it is hard to demonstrate anything but a subgeneric status for it. The one character used, the matter of apical tibial spines in the male palpus, is not consistent.